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10/065,269	09/30/2002	Masahide Tanaka	106121.05	5680

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EXAMINER

HERNANDEZ, NELSON D

ART UNIT PAPER NUMBER

2612

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,269

Applicant(s)

TANAKA ET AL.

Examiner

Nelson D. Hernandez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/30/05, 7/14/05, 7/14/04, 4/28/04, 1/23/03, 10/21/02, 6
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because in fig. 15, step S521, the word "DELETIG" should be written as "DELETING". Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. Claim 15 is objected to because of the following informalities: in claim 15, the limitation of "...a detector that detects a start of the transmission of the digital images" is not supported in the Specifications. In the Specification ^{it} is mentioned a detector that detects a signal from the adapter to start the transmission (See page 2, ¶ 0006-0007 and page 13, ¶ 0096). For examining purposed the limitation in the claim will be read as "...a detector that detects a signal from the

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adapter to start the transmission of the digital images". Appropriate correction is required.

4. Claim 22 is objected to because of the following informalities: in claim 22, the limitation of "...a detector that detects a start of the transmission of the digital images" is not supported in the Specifications. In the Specification^{it} is mentioned a detector that detects a signal from the adapter to start the transmission (See page 2, ¶ 0006-0007 and page 13, ¶ 0096). For examining purposed the limitation in the claim will be read as "...a detector that detects a signal from the adapter to start the transmission of the digital images". Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1, 7, 10, 12-15 and 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Chatani, JP 08-069684 A.**

Regarding claim 1, Chatani discloses a digital image storage (Fig. 1) system comprising: a data storage (Fig. 1: 1) including a docking station (see fig. 1: 6) on which a digital camera (Fig. 1: 10) can be placed for transmitting images stored in a memory (Fig. 1: 8) of the digital camera to the docking station and for

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receiving electric power from the docking station to charge a battery (using battery charger in fig. 1: 9) of the digital camera, the data storage further including a storage medium (Fig. 1: 2) that stores the transmitted digital images; and a controller (control circuit in fig. 2: 23) that controls the transmission of the digital images (Fig. 3, step S102) from the digital camera and the charging of the digital camera battery (Fig. 3, step S104) so that the charging and the transmission do not occur at the same time (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Regarding claim 7, Chatani discloses that the docking station has an indicator (display shown in fig. 1: 3) that indicates information relevant to the charge to the battery (see translation, page 7, ¶ 0030).

Regarding claim 10, Chatani discloses a system for use with digital images, comprising: a docking station (see fig. 1: 6) on which a digital camera (Fig. 1: 10) can be placed for transmitting digital images stored in a memory (Fig. 1: 8) of the digital camera to the docking station and for receiving electric power to charge a battery of the digital camera (using battery charger in fig. 1: 9) while the digital camera is placed on the docking station; and a controller (control circuit in fig. 2: 23) that controls the transmission of the digital images (Fig. 3, step S102) from the digital camera and the charging of the digital camera battery (Fig. 3, step S104) so that the charging and the transmission do not occur at the same time (transmission and charging occur at different steps; see fig. 3) (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Regarding claim 12, Chatani discloses that the controller controls the transmission of the digital images and the charging of the battery so that the charging of the battery is started after the transmission of the digital images is stopped (as shown in fig. 4, the transmission of images occur in step S102 and the charging of the battery occur in step S104) (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Regarding claim 13, Chatani discloses that the controller automatically starts the charging of the battery after the transmission of the digital images is stopped (as shown in fig. 4, the transmission of images occur in step S102 and the charging of the battery occur in step S104) (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Regarding claim 14, Chatani inherently discloses that the controller starts the charging of the battery after a predetermined period of time has passed after the transmission of the digital images is stopped by teaching that the transmission of images occur in step S102 and the charging of the battery occur in step S104 (see fig. 4), since the transmission and charging of battery occur at different steps, it is expected to have a predetermined amount of time since the transmission is stopped to start charging the battery. Grounds for rejecting claim 1 apply here.

Regarding claim 15, Chatani discloses a detector that detects a signal from the adapter to start the transmission of the digital images (See translation, page 6, ¶ 0023 – page 7, ¶ 0030).

Regarding claim 17, Chatani discloses a digital camera (Fig. 1: 10) having a battery and a memory (Fig. 1: 8) capable of storing digital images (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Regarding claim 18, Chatani discloses a storage medium (Fig. 1: 2) that stores the transmitted digital images from the digital camera memory through the docking station (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Regarding claim 19, Chatani discloses that the controller controls the transmission of the digital images and the charging of the battery so that the charging of the battery is started after the transmission of the digital images is stopped (as shown in fig. 4, the transmission of images occur in step S102 and the charging of the battery occur in step S104) (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Regarding claim 20, Chatani discloses that the controller automatically starts the charging of the battery after the transmission of the digital images is stopped (as shown in fig. 4, the transmission of images occur in step S102 and the charging of the battery occur in step S104) (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Regarding claim 21, Chatani discloses that the controller starts the charging of the battery after a predetermined period of time has passed after the transmission of the digital images is stopped (as shown in fig. 4, the transmission of images occur in step S102 and the charging of the battery occur in step S104) (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

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Regarding claim 22, Chatani discloses that the controller automatically starts the charging of the battery after the transmission of the digital images is stopped (as shown in fig. 4, the transmission of images occur in step S102 and the charging of the battery occur in step S104) (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatani, JP 08-069684 A in view of Dowe, US Patent 5,602,458.

Regarding claim 2, Chatani fails to teach the digital camera including a manually operable power switch that switches the digital camera between an operative state and an inoperative state.

However, Dowe teaches a camera (Fig. 3: 110) comprising a power switch (Fig. 1: 16) that switches the digital camera between an operative state and an inoperative state (Col. 2, line 65 – col. 3, line 14). It is advantageous to have the camera comprising a power switch, so the camera can be turn off when is not needed to pickup images in order to increase the battery life of said camera.

Therefore, taking the combined teaching of Chatani in view of Dowe as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera in Chatani by having a power switch that switches the digital camera between an operative state and an inoperative state with the motivation of increasing the battery life of said camera.

Regarding claim 3, Chatani fails to teach that the controller starts the charging of the digital camera battery regardless of the manual operation of the digital camera power switch between the operative state and the inoperative state.

However, Dowe teaches a camera (Fig. 3: 110) comprising a power switch (Fig. 1: 16) that switches the digital camera between an operative state and an inoperative state (Col. 2, line 65 – col. 3, line 14), said camera is connected to a charging cradle (Fig. 3: 112) in order to recharge the battery in said camera, wherein, when said camera is connected to said charging cradle, the charging cradle proceeds to charge the battery of said camera, regardless of the status of the power switch of said camera (Col. 2, lines 29-46; col. 3, lines 32-56; col. 4, lines 26-37; col. 5, lines 9-37).

Therefore, taking the combined teaching of Chatani in view of Dowe as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera in Chatani by charging of the digital camera battery regardless of the manual operation of the digital camera power switch between the operative state and the inoperative state. The motivation to do so would have been to recharge the battery even if the camera

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power switch is mistakenly left in an on condition, ensuring that the battery will be recharged and ready for use as suggested by Dowe (Col. 2, lines 39-46).

Regarding claim 4, limitations can be found in claim 2.

Regarding claim 5, the combined teaching of Chatani in view of Dowe as applied to claim 4 teaches that the controller causes the digital camera to be switched from the operative state to the inoperative state before the controller causes the digital camera battery to be charged (See Dowe, col. 2, lines 29-46; col. 3, lines 31-56; col. 5, lines 9-28).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chatani, JP 08-069684 A in view of Dowe, US Patent 5,602,458 and further in view of Takahashi, US Patent 6,580,460 B1.

Regarding claim 6, the combined teaching of Chatani in view of Dowe fails to teach that the controller switches the digital camera from the operative state to the inoperative state subsequent to completion of the transmission of the digital images.

However, Takahashi teaches a camera (Fig. 1: 117) connectable to a printer (Fig. 1: 118) for transmission of image data from said camera to said printer, wherein, when the transfer of image data from the camera to the printer is completed, said camera proceeds to turn off its power supply in order to reduce consumption of power (Col. 3, lines 29-42; col. 14, lines 19-25).

Therefore, taking the combined teaching of Chatani in view of Dowe and further in view of Takahashi as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera

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in Chatani and Dowe by switching the digital camera from the operative state to the inoperative state subsequent to completion of the transmission of the digital images. The motivation to do so would have been to reduce consumption of power in said camera as suggested by Takahashi (Col. 14, lines 19-25).

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chatani, JP 08-069684 A in view of Ramsier, US Patent 5,844,400.

Regarding claim 8, Chatani fails to teach a battery detector that detects a kind of battery within the digital camera.

However, detecting a kind of battery of an electronic device connected to a docking station is notoriously well known in the art as taught by Ramsier, who teaches a mobile terminal (Fig. 2: 10) is connectable to a cradle (Fig. 2: 90), wherein said cradle comprises a processor (Fig. 4: 200), which is able to discriminate among different battery types being used in the mobile terminal when said mobile terminal is connected to said cradle, the cradle determines the type of battery (Col. 2, lines 8-52; col. 5, lines 36-65; col. 7, line 47 – col. 8, line 11; col. 8, lines 25-62). Although the electronic device in Ramsier is a mobile telephone and not a camera, Ramsier teaches that the concept may be applied to any other electronic portable device, which employs rechargeable batteries (Col. 4, lines 15-38).

Therefore, taking the combined teaching of Chatani in view of Ramsier as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the docking station in Chatani to discriminate a kind of battery being used in the camera. The motivation to do so would have

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been to increase the versatility in the use various types of batteries in the camera since one battery charger may be employed to charge the various typed of batteries that may be used as suggested by Ramsier (Col. 2, lines 8-21).

11. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatani, JP 08-069684 A in view of Takahashi, US Patent 6,580,460 B1.

Regarding claim 9, Chatani discloses a digital image storage system (Fig. 1) comprising: a digital camera (Fig. 1: 10) having a memory (Fig. 1: 8) capable of storing digital images; a data storage (Fig. 1: 1) including a docking station (Fig. 1: 6) on which the digital camera can be laid for transmitting the digital images of the digital camera memory to the docking station, a storage medium (Fig. 1: 2) that stores the digital images transmitted from the digital camera memory from the docking station; and a controller (control circuit in fig. 2: 23) that receives a signal from the docking station to receive the transmission of the digital images (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029).

Chatani fails to teach a manually operable power switch that switches the digital camera between an operative state and an inoperative state and that after the digital images transmission is terminated, the controller automatically causes a switching of the digital camera from the operative state to the inoperative state without the manual operation of the power switch.

However, Takahashi teaches a camera (Fig. 1: 117) connectable to a printer (Fig. 1: 118) for transmission of image data from said camera to said printer, the camera comprising a power switch that switches the digital camera

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between an operative state and an inoperative state (Col. 12, line 63 – col. 13, line 36), wherein, when the transfer of image data from the camera to the printer is completed, said camera proceeds to turn of its power supply in order to reduce consumption of power (Col. 3, lines 29-42; col. 14, lines 19-25).

Therefore, taking the combined teaching of Chatani in view of Dowe and further in view of Takahashi as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera in Chatani and Dowe by switching the digital camera from the operative state to the inoperative state subsequent to completion of the transmission of the digital images. The motivation to do so would have been to reduce consumption of power in said camera as suggested by Takahashi (Col. 14, lines 19-25).

Regarding claim 11, Chatani discloses a digital image storage system comprising: a digital camera (Fig. 1: 10) having a memory (Fig. 1: 8) capable of storing digital images; a docking station (Fig. 1: 6) on which a digital camera can be placed for transmitting the digital images of the digital camera memory to the docking station; a storage medium (Fig. 1: 2) that stores the digital images transmitted from the digital camera through the docking station; and a controller (control circuit in fig. 2: 23) that receives a signal from the docking station to receive the transmission of the digital images (See translation, page 6, ¶ 0019, ¶ 0023 – page 7, ¶0029)

Chatani fails to teach a manually operable power switch that switches the digital camera between an operative state and an inoperative state and that after the digital images transmission is terminated, the controller automatically causes

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a switching of the digital camera from the operative state to the inoperative state without the manual operation of the power switch.

However, Takahashi teaches a camera (Fig. 1: 117) connectable to a printer (Fig. 1: 118) for transmission of image data from said camera to said printer, the camera comprising a power switch that switches the digital camera between an operative state and an inoperative state (Col. 12, line 63 – col. 13, line 36), wherein, when the transfer of image data from the camera to the printer is completed, said camera proceeds to turn of its power supply in order to reduce consumption of power (Col. 3, lines 29-42; col. 14, lines 19-25).

Therefore, taking the combined teaching of Chatani in view of Dowe and further in view of Takahashi as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera in Chatani and Dowe by switching the digital camera from the operative state to the inoperative state subsequent to completion of the transmission of the digital images. The motivation to do so would have been to reduce consumption of power in said camera as suggested by Takahashi (Col. 14, lines 19-25).

12. Claims 16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatani, JP 08-069684 A in view of Asakawa, US Patent 6,135,809.

Regarding claim 16, Chatani fails to teach that the detector includes a mechanical contact and a sensor.

However, using a mechanical connector and a sensor for detecting the connection of an electronic device to another is well known in the art as taught by

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Asakawa. Asakawa teaches a card connector (Figs. 3 and 5A-5C) having electrical contacts (Fig. 3, items 20 and 52) forming electrical connections with a memory card (Figs. 5A-5C, item C) inserted therein and detecting or sensing unit including a set of sensing members connected to a detecting circuit indicating the state when the card is fully inserted into the connector, and one of the sensing members (Fig. 3, items 20-20c, 52 and 54) has a bend that exerts pressure on one surface of the card in a perpendicular direction relative to the one surface and closes or opens the detecting circuit (See figs. 3 and 5; col. 1, lines 57-65; col. 2, line 59 – col. 3, line 39).

Therefore, taking the combined teaching of Chatani in view of Asakawa as a whole, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the connection means in Chatani by including sensing members connected to the detecting circuit to determine if the connection means for connecting the camera and the image storage is fully inserted. The motivation to do so would have been so would help the image storage to determine whether the camera is properly connected to the image storage, providing reliable electrical connection between the devices as suggested in Asakawa (Col. 1, lines 46-51).

Regarding claim 23, Chatani fails to teach that the detector includes a mechanical contact and a sensor.

However, using a mechanical connector and a sensor for detecting the connection of an electronic device to another is well known in the art as taught by Asakawa. Asakawa teaches a card connector (Figs. 3 and 5A-5C) having

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electrical contacts (Fig. 3, items 20 and 52) forming electrical connections with a memory card (Figs. 5A-5C, item C) inserted therein and detecting or sensing unit including a set of sensing members connected to a detecting circuit indicating the state when the card is fully inserted into the connector, and one of the sensing members (Fig. 3, items 20-20c, 52 and 54) has a bend that exerts pressure on one surface of the card in a perpendicular direction relative to the one surface and closes or opens the detecting circuit (See figs. 3 and 5; col. 1, lines 57-65; col. 2, line 59 – col. 3, line 39).

Therefore, taking the combined teaching of Chatani in view of Asakawa as a whole, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the connection means in Chatani by including sensing members connected to the detecting circuit to determine if the connection means for connecting the camera and the image storage is fully inserted. The motivation to do so would have been so would help the image storage to determine whether the camera is properly connected to the image storage, providing reliable electrical connection between the devices as suggested in Asakawa (Col. 1, lines 46-51).

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez
Examiner
Art Unit 2612

NDHH
November 22, 2005



NGOC-YEN VU
PRIMARY EXAMINER